



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,449	09/01/2004	Hideji Wakabayashi	258104US2PCT	3397

22850 7590 11/07/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

PHAM, TUAN

ART UNIT	PAPER NUMBER
----------	--------------

2643

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/505,449

Applicant(s)

WAKABAYASHI, HIDEJI

Examiner

TUAN A. PHAM

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/1/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 09/01/2004 has been considered by Examiner and made of record in the application file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. **Claims 1-2, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Terry (Pub. No.: US 2003/0228865).**

Regarding claim 1, 2, and 8, Terry teaches a mobile communication system (see figure 2) in which a base station (see figure 2, base station 100 and mobile stations (see figure 2, mobile station UE1) carry out radio communication by using a plurality of control channels (see figure 2, plurality of control channels 14-1 to 14-n) and a shared channel (see figure 2, shared channel 16, col.2, [0021]), wherein the base station transmits, when transmitting data to a mobile station using the shared channel (see figure 2, [0021-0022]), control information, which is necessary for the mobile station to receive the data, to the mobile station using a predetermined control channel (see [0021-0022], dedicated channel is assigned for each of mobile station); and the mobile station receives the control information from the predetermined control channel, and receives the data from the shared channel referring to the control information (see figure 2, [0021-0030]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 3-6, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry (Pub. No.: US 2003/0228865) in view of Nisbet (Pub. No.: US 2002/0155839).**

Regarding claims 3 and 9, Terry teaches a mobile communication system (see figure 2) in which a base station (see figure 2, base station 100 and mobile stations (see figure 2, mobile station UE1) carry out radio communication by using a plurality of control channels (see figure 2, plurality of control channels 14-1 to 14-n) and a shared channel (see figure 2, shared channel 16, col.2, [0021]), wherein the base station transmits, when transmitting data to a mobile station using the shared channel (see figure 2, [0021-0022]), control information, which is necessary for the mobile station to receive the data, to the mobile station using a predetermined control channel (see [0021-0022], dedicated channel is assigned for each of mobile station); and the mobile station receives the control information from the predetermined control channel, and receives the data from the shared channel referring to the control information (see figure 2, [0021-0030]).

It should be noticed that Terry fails to teach the base station transmits the control information intermittently. However, Nisbet teaches such features (see [0024]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Nisbet into view of Terry in order to reduce the power.

Regarding claims 4 and 10, Terry teaches said base station accepts changes of a transmitting cycle of the control information (see [0024]).

Regarding claims 5 and 11, Nisbet teaches said base station switches the control channel that transmits the control information in accordance with preset switching conditions (see [0024]).

Regarding claims 6 and 12, Nisbet teaches switching the control channel, said base station transmits switching information about the control channel to said mobile station (see [0024]).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Terry (Pub. No.: US 2003/0228865) in view of Baker et al. (Pub. No.: US 2002/0067309, hereinafter, "Baker").

Regarding claim 7, Terry teaches a mobile communication system (see figure 2) in which a base station (see figure 2, base station 100 and mobile stations (see figure 2, mobile station UE1) carry out radio communication by using a plurality of control channels (see figure 2, plurality of control channels 14-1 to 14-n) and a shared channel (see figure 2, shared channel 16, col.2, [0021]), wherein the base station transmits, when transmitting data to a mobile station using the shared channel (see figure 2, [0021-0022]), control information, which is necessary for the mobile station to receive the data, to the mobile station using a predetermined control channel (see [0021-0022], dedicated channel is assigned for each of mobile station); and the mobile station receives the control information from the predetermined control channel, and receives the data from the shared channel referring to the control information (see figure 2, [0021-0030]).

It should be noticed that Terry fails to teach said base station divides said mobile stations into groups in accordance with a transmission volume of data to each mobile station, selects simultaneous transmission target mobile stations from the groups, and

assigns the plurality of control channels to the simultaneous transmission target mobile stations. However, Baker teaches such features (see figure 3, [0028-0029]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Baker into view of Terry in order to reduce the power.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Dick et al. (U.S. Pub. No. 2003/0176195), Das et al. (U.S. Pub. No. 2003/0157953), Kim et al. (U.S. Pub. No. 2002/0061746), and Malkamaki (U.S. Pub. No. 2004/0097253) are not applied into this Office Action; they are also called to Applicants attention. They may be used in future Office Action(s).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (571) 272-7499 and

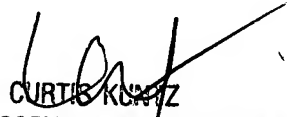
**IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE
CALL Customer Service at (571) 272-2600 FOR THE SUBSTITUTIONS OR COPIES.**

Art Unit: 2643

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2643
October 31, 2005
Examiner

Tuan Pham


CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600